

Notice of Allowability

Application No.

09/405,716

Examiner

Zandra V. Smith

Applicant(s)

WANG ET AL.

Art Unit

2877

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment filed 18 November 2003.
2. ☒ The allowed claim(s) is/are 1-65, 67-82 and 88-144.
3. ☒ The drawings filed on 24 November 1999 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Zandra V. Smith
Primary Examiner
Art Unit: 2877

DETAILED ACTION

Allowable Subject Matter

Claims 1-65, 67-82, and 88-144 are allowable over the prior art of record.

The following is a statement of reasons for the indication of allowable subject matter: the prior art of record, taken alone or in combination, fails to disclose or render obvious a sample measurement system that derives one or more parameters of a system and one or more ellipsometric parameters of a sample using the same measurement, in combination with the rest of the limitations of the claims 1, 90, and 107.

Regarding claims 17, 29, and 59, the prior art of record, taken alone or in combination, fails to disclose or render obvious a sample measurement system that includes the combination of a fixed or rotating polarizing element, prior to the sample, a second rotating polarizing element and a fixed linear polarizer after the sample, in combination with the rest of the limitations of the claims.

As to claims 37 and 70, the prior art of record, taken alone or in combination, fails to disclose or render obvious a sample measurement system that includes the provision of linearly polarized light to a sample and a rotating phase modulator and a rotating polarizer to derive ellipsometric parameters of the sample and parameters of the source, optics or modulator, in combination with the rest of the limitations of claims.

As to claim 80, the prior art of record, taken alone or in combination, fails to disclose or render obvious, a sample measurement system that includes the use of a cylindrical objective lens and determining one or more ellipsometric parameters in response to detected radiation, in combination with the rest of the limitations of the claim.

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Regarding claims 97, 103, 114, 119, and 123-125, the prior art of record, taken alone or in combination, fails to disclose or render obvious a system that determines film thickness and depolarization of a sample, in combination with the rest of the limitations of the claims.

Regarding claims 130 and 140, the prior art of record, taken alone or in combination, fails to disclose or render obvious a system for measuring a surface of a sample that includes a cylindrical objective for focusing radiation from the beam to the sample in a direction away from a normal direction to the sample and a modulating device to modulating the beam of radiation as a function of time prior to detection, in combination with the rest of the limitations of the claims.

Fax/Telephone Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zandra V. Smith whose telephone number is (571) 272-2429. The examiner can normally be reached on 8:00 a.m. - 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Zandra V. Smith

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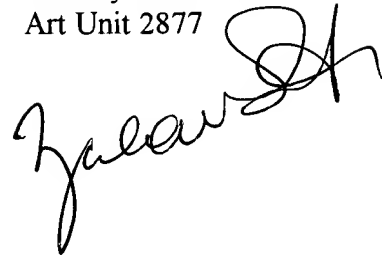
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Primary Examiner

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April 2, 2004

A handwritten signature in black ink, appearing to read "Zulawski", written over the printed name "Primary Examiner".